PREVENTION OF FOOD ADULTERATION

NOTIFICATION

Dated 7th June, 2005

Whereas a draft of certain rules further to amend the Prevention of Food Adulteration Rules, 1955, were published, as required by sub-section (1) of section 23 of the Prevention of Food Adulteration Act, 1954 (37 of 1954), at pages 1 to 94 in the Gazette of India, Extraordinary, Part II, Section 3, Sub-Section (i) dated the 20th June, 2003 under the notification of the Government of India in the Ministry of Health and Family Welfare (Department of Health), Number G.S.R.497(E) dated the 20th June, 2003 inviting objections and suggestions from all persons likely to be affected thereby before the expiry of a period of sixty days from the date on which the copies of the Official Gazette containing the said notification, were made available to the public;

And whereas the copies of the said Gazette were made available to the public on the 25th June, 2003;

And whereas objections or suggestions received from the public within the specified period on the said draft rules have been considered by the Central Government;

Now, therefore, in exercise of the powers conferred by section 23 of the said Act, the Central Government, after consultation with the Central Committee for Food Standards, hereby makes the following rules further to amend the Prevention of Food Adulteration Rules, 1955, namely:-

- 1. (1) These rules may be called the Prevention of Food Adulteration (Fourth Amendment) Rules, 2005.
 - (2) They shall come into force after six months from the date of publication in the official Gazette.
- 2. In the Prevention of Food Adulteration Rules, 1955 (hereinafter referred to as the said rules),-
 - (i) In rule 42, in sub rule (zzz), after clause (18), the following shall be inserted, namely:- "(ZZZ) (19)
 - Every package of Low Fat Paneer/Chhana shall carry the following label, namely:-

Low Fat Paneer/Chhana

(ZZZ)(20) - Every package of Cheese(s), if coated/packed with food grade waxes/polyfilm/ wrapping of cloth, shall bear the following label namely:-

Remove the outer coating/packing before consumption

(ZZZ) (21) - Every package of Frozen Desert/Frozen Confection shall bear the following label, namely:-

Frozen Deserts/Frozen Confection Contain......Milk Fat*/ Edible

Vegetable Oil*/and Vegetable Fat*.

- * Strike out whichever is not applicable.
 - (ii) In Appendix 'B' to the said rules,-
 - (a) for item "A 07.04.01", the following shall be substituted, namely:-
 - **"A. 07.04.01 Ice Candy** means the product obtained by freezing a pasteurized mix prepared from a mixture of water, nutritive sweeteners e.g. "sugar, dextrose, liquid glucose, dried liquid glucose, honey", fruits and fruit products, coffee, cocoa, ginger, nuts and salt. The product may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirement

 - (b) in item "A.11.01.01", the following shall be added at the end, namely: "Total urea content in the milk shall not be more than 700 ppm".
 - (c) in item "A.11.01.11",-
 - (i) against the entry "Buffalo Milk" occurring in column 1, under column 3,-
 - (a) after the words, "Haryana", the words, "Jharkhand" shall be inserted;
 - (b) after the words, "Uttar Pradesh", the words, "Uttaranchal" shall be inserted;
 - (c) after the words, "Arunachal Pradesh", the words, "Chhatisgarh" shall be inserted;
 - (ii) against the entry, "Cow Milk" occurring in column 1, under column 3, -
 - (a) after the words, "Bihar", the words, "Chhatisgarh" shall be inserted;
 - (b) after the words, "Uttar Pradesh", the words, "Uttaranchal" shall be inserted;
 - (c) after the words, "Jammu and Kashmir", the words, "Jharkhand" shall be inserted;
 - (iii) against the entry, "Goat or Sheep Milk" occurring in column 1, under column 3, -
 - (a) after the words, "Chandigarh", the words, "Chhatisgarh" shall be inserted;

- (b) after the words, "Uttar Pradesh", the words, "Uttaranchal", shall be inserted;
- (c) after the words, "Jammu and Kashmir", the words, "Jharkhand" shall be inserted;
- (d) after item A.11.02.02, the following shall be inserted, namely:-

"A.11.02.02.01- Cream Powder means the product obtained by partial removal of water from cream obtained from milk of cow and/or buffalo. The fat and/or protein content of the cream may be adjusted by addition and/or withdrawal of milk constituents in such a way as not to alter the whey protein to casein ratio of the milk being adjusted. It shall be of uniform colour and shall have pleasant taste and flavour free from off flavour and rancidity. It shall also be free from vegetable oil/fat, mineral oil, added flavour and any substance foreign to milk. The product may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

- (i) Moisture -Not more than 5.0 percent
- (ii) Milk fat -Not less than 42.0 percent
- (iii) Milk protein in Milk solid not fat -Not less than 34.0 percent.";
- (e) in item A.11.02.05, the following shall be added at the end, namely:-

"Provided that paneer or chhana when sold as low fat paneer or chhana, it shall conform to the following requirements: -

- (i) Moisture -Not more than 70.0 percent
- (ii) Milk fat -Not more than 15.0 percent of dry matter:

Provided further that such low fat paneer/chhana shall be sold in sealed package only and shall bear proper label declaration as provided in sub rule (zzz) (19) of rule 42.";

(f) for items A.11.02.07, A.11.02.07.01 and A.11.02.07.02, the following shall be substituted, namely:-

"A.11.02.06 - Cheese means the ripened or unripened soft or semihard, hard and extra hard product, which may be coated with food grade waxes or polyflm, and in which the whey protein/casein ratio does not exceed that of milk. Cheese is obtained by coagulating wholly or partly milk and/or products obtained from milk through the action of non-animal rennet or other suitable coagulating agents and by partially draining the whey resulting from such coagulation and/or processing techniques involving coagulation of milk and/or products obtained from milk which give a final product with similar physical, chemical and organoleptic characteristics. The product may contain starter cultures of harmless lactic acid and/or flavour producing bacteria and cultures of other harmless microorganisms, safe and suitable enzymes and sodium chloride. It may be in the form of blocks, slices, cut, shredded or grated cheese.

Ripened Cheese is cheese which is not ready for consumption shortly after manufacture but which must be held for some time at such temperature and under such other conditions as will result in necessary biochemical and physical changes characterising the cheese in question.

Mould Ripened cheese is a ripened cheese in which the ripening has been accomplished primarily by the development of characteristic mould growth throughout the interior and/or on the surface of the cheese.

Unripened cheese including fresh cheese is cheese which is ready for consumption shortly after manufacture.

Cheese or varieties of cheeses shall have pleasant taste and flavour free from off flavour and rancidity. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D:

Provided that cheese or varieties of cheeses coated with food grade waxes/or polyfilm/or wrapping of cloth shall bear proper label declaration as provided in sub-rule (ZZZ) (20) of rule 42. It shall conform to the following requirements:

Product	Moisture	Milk Fat on Dry Basis
(1)	(2)	(3)
(i) Hard Pressed Cheese	Not more than 39.0 percent	Not less than 48.0 percent
(ii) Semi Hard Cheese	Not more than 45.0 percent	Not less than 40.0 percent
(iii) Semi Soft Cheese	Not more than 52.0 percent	Not less than 45.0 percent
(iv) Soft Cheese	Not more than 80.0 percent	Not less than 20.0 percent
(v) Extra Hard Cheese	Not more than 36.0 percent	Not less than 32.0 percent
(vi) Mozzarella Cheese	Not more than 60.0 percent	Not less than 35.0 percent

A.11.02.06.01 - Processed Cheese means the product obtained by grinding, mixing, melting and emulsifying one or more varieties of cheeses with the aid of heat and emulsifying agents. It may contain cream, butter, butter oil and other milk products subject to maximum 5.0 percent lactose content in the final product and edible common salt, vinegar/acetic acid, spices and other vegetable seasoning and foods other than sugars properly cooked or prepared for flavouring and characterization of the product provided these additions do not exceed one sixth of the weight of the total solids of the final product on dry matter basis and cultures of harmless bacteria and enzymes. It shall have pleasant taste and smell free from off flavour and rancidity. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

- (i) Moisture -Not more than 47.0 percent
- (ii) Milk Fat on dry basis -Not less than 40.0 percent :

Provided that processed cheese chiplets (packed sliced cheese) when sold in a package other than tin, shall not contain more than 50.0 percent moisture.

A.11.02.06.02- Processed Cheese Spread means the product obtained by grinding, mixing, melting and emulsifying one or more varieties of cheese with emulsifying agents with the aid of heat. It may contain Cream, Butter /Butter oil and other dairy products, subject to a maximum limit of 5.0 percent lactose in the final product, salt, vinegar, spices, condiments and seasonings, natural carbohydrate sweetening agents namely sucrose, dextrose, corn syrup, corn syrup solids, honey, maltose, malt syrup and hydrolysed lactose and foods properly cooked or otherwise prepared for flavouring and characterization of the product provided these additions do not exceed one sixth of the weight of total solids of the final product on dry weight basis and cultures of harmless bacteria and enzymes. It shall have pleasant taste and flavour free from off flavour and rancidity. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

- (i) Moisture -Not more than 60.0 percent
- (ii) Milk Fat on dry basis -Not less than 40.0 percent

A.11.02.06.03-Cheddar Cheese means ripened hard cheese obtained by coagulating heated/pasteurized milk of Cow and/or Buffalo or mixtures thereof with cultures of harmless lactic acid producing bacteria, non-animal rennet or other suitable coagulating enzymes. It shall be in the form of hard pressed block with a coating of food grade waxes or wrapping of cloth, or polyfilm. It shall have firm, smooth and waxy texture with a pale straw to orange colour without any gas holes. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

- (i) Moisture -Not more than 39.0 percent
- (ii) Milk Fat on Dry basis -Not less than 48.0 percent
- **A. 11.02.06.04-Danbo Cheese** means ripened semi hard cheese obtained by coagulating heated/pasteurized milk of Cow and/or Buffalo and mixtures thereof with cultures of harmless lactic acid producing bacteria, non-animal rennet or other suitable coagulating enzymes. It shall be smooth in appearance with firm texture and uniform yellow colour and may be coated with food grade waxes wrapping of cloth, or polyfilm. It may contain loud additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:
 - (i) Moisture -Not more than 39.0 percent
 - (ii) Milk Fat on Dry basis -Not less than 45.0 percent

A.11.02.06.05 – Edam Cheese means the ripened semi hard cheese obtained by coagulating heated pasteurized milk of Cow and/or Buffalo or mixtures thereof with cultures of harmless lactic acid producing bacteria, non-animal rennet or other suitable coagulating enzymes. It shall have a firm texture suitable for cutting with a yellowish colour and a hard rind which may be coated with food grade waxes, wrapping of cloth, polyfilm or vegetable oil. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

- (i) Moisture -Not more than 46.0 percent
- (ii) Milk Fat on Dry basis -Not less than 40.0 percent

A.11.02.06.06 – Gouda Cheese means ripened semi hard cheese obtained by coagulating milk of Cow and/or Buffalo or mixtures thereof with cultures of harmless lactic acid producing bacteria, non-animal rennet or other suitable coagulating enzymes. It shall have firm texture suitable for cutting, straw to yellowish colour and a hard rind which may be coated with food grade waxes, wrapping of cloth, or vegetable oil. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It

- (i) Moisture -Not more than 43.0 percent
- (ii) Milk Fat on Dry basis -Not less than 48.0 percent

A.11.02.06.07- Havarti Cheese means ripened semi hard cheese obtained by coagulating milk of Cow and/or Buffalo or mixtures thereof with cultures of harmless lactic acid producing bacteria, non-animal rennet or other suitable coagulating enzymes. It shall have firm texture suitable for cutting, a light yellow colour and may have a semi soft slightly greasy rind. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

Requirements	Havarti	30 percent Havarti	60 percent Havarti
(1)	(2)	(3)	(4)
Moisture	Not more than 48.0	Not more than 53.0	Not more than 60.0
	percent	percent	percent
Milk Fat on Dry basis	Not less than 45.0	Not less than 30.0	Not less than 60.0
	percent	percent	percent

A.11.02.06.08- Tilsiter means ripened semi hard cheese obtained by coagulating milk or Cow and/or Buffalo or mixtures thereof with cultures of harmless lactic acid producing bacteria and cultures of Bacterium linens, non-animal rennet or other suitable coagulating enzymes. It shall have firm texture suitable for cutting with a ivory to yellow colour with a firm rind which may show red and yellow smear producing a bacteria or coated with food grade waxes or wrapping of cloth, or polyfilm after removal of the smear. It may contain food additives permitted in Appendix C. It shall conform to the microbiologic requirements prescribed in Appendix D. It shall conform to the following requirements:

Requirements	Tilsiter	30 percent Tilsiter	60 percent Tilsiter
(1)	(2)	(3)	(4)
Moisture	Not more than 47.0	Not more than 53.0	Not more than 39.0
	percent	percent	percent
Milk Fat on Dry basis	Not less than 45.0	Not less than 30.0	Not less than 60.0
	percent	percent	percent

A.11.02.06.09- Cottage Cheese and Creamed Cottage Cheese means soft unripened cheese obtained by coagulation of pasteurized skimmed milk of Cow and/or Buffalo or mixtures thereof with cultures of harmless lactic acid bacteria with or without the addition of other suitable coagulating enzymes. Creamed Cottage Cheese is cottage cheese to which a pasteurized creaming mixture of cream, skimmed milk, condensed milk, non fat dry milk, dry milk protein, Sodium/Potassium/Calcium/Ammonium caseinate is added. It shall have a soft texture with a natural white colour. It may contain spices, condiments, seasonings and fruits pulp. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

- (i) Moisture -Not more than 80.0 percent
- (ii) Milk Fat -Not less than 4.0 percent

(in Creamed Cottage Cheese)

A.11.02.06.10- Cream Cheese (Rahmfrischkase) means soft unripened cheese obtained by coagulation of pasteurized milk of cow and/or buffalo or mixtures thereof and pasteurized cream with cultures of harmless lactic acid producing bacteria with or without the addition of suitable coagulating enzymes. It shall have a soft smooth texture with a white to light cream colour. It may contain spices, condiments, seasonings and fruits pulp. The product may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

- (i) Moisture -Not more than 55.0 percent
- (ii) Milk Fat on Dry basis -Not less than 70.0 percent

A.11.02.06.11- Coulommiers Cheese means soft unripened cheese obtained by coagulation of milk of cow and/or buffalo or mixtures thereof with cultures of harmless lactic acid producing bacteria and non-animal rennet or other suitable coagulating enzymes and moulds characteristic of the variety. It shall have soft texture and white to cream yellow colour and may show presence of white mould including orange or red spots on the surface. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

- (i) Moisture -Not more than 56.0 percent
- (ii) Milk Fat on Dry basis -Not less than 46.0 percent

A.11.02.06.12- Camembert Cheese means ripened soft cheese obtained by coagulating milk of Cow and/or Buffalo or mixtures thereof with cultures of harmless lactic acid producing bacteria and cultures of Penicillium

caseicolum and Bacterium linens, non-animal rennet or other suitable coagulating enzymes. It may be in the form of flat cylindrical shaped cheese covered with white mould (Penicillum caseicolum) with occasional orange coloured spots (Bacterium linens). It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

Requirements	30.0 percent Camembert Cheese	40.0 percent Camembert Cheese	45.0 percent Camembert Cheese	50.0 percent Camembert Cheese
(1)	(2)	(3)	(4)	(5)
Moisture	Not more than	Not more than	Not more than	Not more than
	62.0 percent	56.0 percent	56.0 percent	56.0 percent
Milk Fat on Dry	Not less than 30.0	Not less than 40.0	Not less than 45.0	Not less than
basis	percent	percent	percent	50.0 percent

A. 11.02.06.13- Brie Cheese means soft ripened cheese obtained by coagulating milk of Cow and/or Buffalo or mixtures thereof with cultures of harmless lactic acid producing bacteria and cultures of Penicillium caseicolum and Bacterium linens, non-animal rennet and other suitable enzymes. It shall be white to creamy yellow in colour with a smooth texture showing presence of white mould (Penicillium caseicolum) with occasional orange coloured spots (Bacterium linens) on the rind. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

- (i) Moisture -Not more than 56.0 percent
- (ii) Milk Fat on Dry basis -Not less than 40.0 percent

A.11.02.06.14- Saint Paulin means ripened semi hard cheese obtained by coagulating milk of Cow and or Buffalo or mixtures thereof with non-animal rennet, cultures of harmless lactic acid producing bacteria or other suitable enzymes. It shall have white to yellow colour with a firm and flexible texture and a hard rind which may be coated with food grade waxes or polyfilm. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

- (i) Moisture -Not more than 56.0 percent
- (ii) Milk Fat on Dry basis -Not less than 40.0 percent

A.11.02.06.15- Samsoe means hard ripened cheese obtained by coagulating milk of Cow and/or Buffalo or combination there of with non-animal rennet and cultures of harmless lactic acid producing bacteria or suitable coagulating enzymes. It shall be yellow in colour with a firm texture suitable for cutting and may have a rind with or without food grade waxes or polyfilm coating. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

Requirements	Samsoe	30 percent Samsoe
(1)	(2)	(3)
(i) Moisture	Not more than 44.0 percent	Not more than 50.0 percent
(ii) Milk Fat on Dry basis	Not less than 45.0 percent	Not less than 30.0 percent

A.11.02.06.16- Emmentaler means hard ripened cheese with round holes obtained by coagulating milk of Cow and/or Buffalo or mixtures thereof with non-animal rennet, cultures of harmless lactic acid producing bacteria or other suitable coagulating enzymes. It may contain Cupric Sulphate not exceeding 15 mg/kg expressed as Copper. It shall have a light yellow colour and a firm texture suitable for cutting and may have a hard rind. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

- (i) Moisture -Not more than 40.0 percent
- (ii) Milk Fat on Dry basis -Not less than 45.0 percent

A.11.02.06.17- Provolone means pasta filata cheese obtained by coagulating milk of Cow and/or Buffalo or mixtures thereof with cultures of harmless lactic acid producing bacteria, non-animal rennet or other suitable coagulating enzymes. It may shall be white to yellow straw in colour with a fibrous or smooth body and rind which may be covered with vegetable fat/oil, food grade waxes or polyfilm. It may contain food additives permitted in Appendix C. It shall conform to the microbiological prescribed in Appendix D. It shall conform to the following requirements:

- (i) Moisture
- (a) Unsmoked Cheese -Not more than 47.0 percent
- (b) Smoked Cheese -Not more than 45.0 percent
- (ii) Milk Fat on Dry basis -Not less than 45.0 percent

A.11.02.06.18 – Extra Hard Grating Cheese means ripened cheese obtained by coagulating milk of Cow and/or Buffalo, goat/sheep milk or mixtures thereof with cultures of harmless lactic acid producing bacteria, non-animal rennet, or other suitable coagulating enzymes. It may be white to light cream in colour

with a slightly brittle texture and an extra hard rind which may be coated with vegetable oil, food grade waxes or polyfilm. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

- (i) Moisture -Not more than 36.0 percent
- (ii) Milk Fat on Dry basis -Not less than 32.0 percent.";
- (g) for items A.11.02.08, A.11.02.08.01, A.11.02.09, A.11.02.10, A.11.02.11, A.11.02.12, A.11.02.13, A.11.02.13.01, A.11.02.14, A.11.02.15 and A.11.02.16, the following shall be substituted, namely:-

"A. 11.02.07- Ice Cream, Kulfi, Chocolate Ice Cream or Softy Ice Cream means the product obtained by freezing a pasteurised mix prepared from milk and/or other products derived from milk with the addition of nutritive sweetening agents e.g. sugar, dextrose, fructose, liquid glucose, dried liquid glucose, maltodextrin, high maltose corn syrup, honey, fruit and fruit products, eggs and egg products, coffee, cocoa, ginger and nuts. It may also contain Chocolate, and bakery products such as cake, or cookies as a separate layer and/or coating. It may be frozen hard or frozen to a soft consistency. It shall be free from artificial sweetener. It shall have pleasant taste and smell free from off flavour and rancidity. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

Requirements	Ice Cream	Medium Fat Ice Cream	Low Fat Ice Cream
(1)	(2)	(3)	(4)
(1) Total Solids	Not less than 36.0 percent	Not less than 30.0 percent	Not less than 26.0 percent
(2)Wt/ Vol. (gms/1)	Not less than 525	Not less than 475	Not less than 475
(3) Milk Fat	Not less than 10.0 percent	Not less than 5.0 percent but less than 10.0 percent	Not more than 2.5 percent
(4) Milk Protein (N x 6.38)	Not less than 3.5 percent	Not less than 3.5 percent	Not less than 2.5 percent

Note:-In case where chocolate, cake or similar food coating, base or layer forms a separate part of the product, only the Ice Cream portion shall conform to the requirements given above. The type of ice-cream shall be clearly indicated on the label otherwise standard for ice-cream shall apply.

A. 11.02.07.01- Dried Ice Cream Mix/Dried Frozen Dessert/Confection means the product in a powder form which on addition of prescribed amount of water shall give a product conforming to the requirements of the respective products, namely,- ice cream, medium fat ice-cream, low fat ice-cream as prescribed under item A.11.02.07 and frozen confection, medium fat frozen confection and low fat frozen confection as prescribed under item A. 11.02.07.02 of these rules except the requirement of weight/volume for both the products. The moisture content of the product shall not be more than 4.0 percent. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D.

A. 11.02.07.02- Frozen Dessert/Frozen Confection means the product obtained by freezing a pasteurized mix prepared with milk fat and/or edible vegetable oils and fats having a melting point of not more than 37.00 C in combination and milk protein alone or in combination/or vegetable protein products in combination with the addition of nutritive sweetening agents e.g. sugar, dextrose, fructose, liquid glucose, dried liquid glucose maltodextrin, high maltose corn syrup, honey, fruit and fruit products, eggs and egg products coffee, cocoa, ginger, and nuts. It may also contain chocolate, cake or cookies as a separate layer or coating. It may be frozen hard or frozen to a soft consistency. It shall be free from artificial sweetener. It shall have pleasant taste and flavour free from off flavour and rancidity. The product may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

Requirements	Frozen Dessert/ Frozen Confection	Medium Fat Frozen Dessert/ Frozen Confection	Low Fat Frozen Dessert/ Frozen Confection
(1)	(2)	(3)	(4)
(1) Total Solids	Not less than 36.0 percent	Not less than 30.0 percent	Not less than 26.0 percent
(2) Weight/ Volume (gms/1)	Not less than 525	Not less than 475	Not less than 475
(3) Total Fat	Not less than 10.0 percent	Not less than 5.0 percent but less than 10.0 percent	Not more than 2.5 percent

(4) Total Protein (N x 6.25)	Not less than 3.5	Not less than 3.5	Not less than 2.5
	percent	percent	percent

Note:- In case where chocolate, cake or similar food coating, base or layer forms a separate part of the product, only the frozen dessert/Frozen confection portion shall conform to the requirements given above. The type of frozen confection shall be clearly indicated on the label otherwise, standards of frozen dessert/frozen confection shall apply and every package of Frozen Dessert/Frozen Confection shall bear proper label declaration as per sub-rule (ZZZ) (21) of rule 42.

A. 11.02.08- Milk Ice or Milk Lolly means the product obtained by freezing pasteurized mix prepared from milk and/or other products derived from milk with the addition of natural sweetening agents i.e. sugar, dextrose, fructose, liquid glucose, dried liquid glucose, maltodextrin, honey, fruit and fruit products, eggs and egg products, coffee, cocoa, ginger, and nuts. It may also contain chocolate, and bakery products such as cake or cookies as a separate layer and/or coating. It shall be free from artificial sweetener. It shall have pleasant taste and smell free from off flavour and rancidity. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

- (1) Total solids (m/m) -Not less than 20.0 percent
- (2) Milk Fat (m/m) -Not more than 2.0 percent
- (3) Milk Protein (N x 6.38) -Not less than 3.5 percent

A. 11.02.09 – Evaporated Milk means the product obtained by partial removal of water from milk of cow and/or buffalo by heat or any other process which leads to a product of the same composition and characteristics. The fat and protein content of the milk may be adjusted by addition and/or withdrawal of milk constituents in such a way as not to alter the whey protein to casein ratio of the milk being adjusted. It shall have pleasant taste and flavour tree from off flavour and rancidity. It shall be free from any substance foreign to milk. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

Product	Milk Fat	Milk Solids	Milk protein in milk solids not fat
(1)	(2)	(3)	(4)
(i) Evaporated Milk	Not less than 8.0 percent m/m	Not less than 26.0 percent m/m	Not less than 34.0 percent m/m
(ii) Evaporated partly skimmed milk	Not less than 1.0 percent and not more than 8.0 percent m/m	Not less than 20.0 percent m/m	Not less than 34.0 percent m/m
(iii) Evaporated Skimmed milk	Not more than 1.0 percent m/m	Not less than 20.0 percent m/m	Not less than 34.0 percent m/m
(iv) Evaporated High Fat milk	Not less than 15.0 percent m/m	Not less than 11.5 percent m/m	Not less than 34.0 percent m/m

A. 11.02.10- Sweetened Condensed Milk means the product obtained by partial removal of water from milk of Cow and/or Buffalo with the addition of sugar or a combination of sucrose with other sugars or by any other process which leads to a product of the same composition and characteristics. The fat and/or protein content of the milk may be adjusted by addition and/or withdrawal of milk constituents in such a way as not to alter the whey protein to casein ratio of the milk being adjusted. It shall have pleasant taste and flavour free from off flavour and rancidity. It shall be free from any substance foreign to milk. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

Product	Milk Fat	Milk Solids	Milk protein in milk solids not fat
(1)	(2)	(3)	(4)
(i) Sweetened condensed milk	Not less than 9.0 percent m/m	Not less than 31.0 percent m/m	Not less than 34.0 percent m/m
(ii) Sweetened condensed skimmed milk	Not more than 1.0 percent m/m	Not less than 26.0 percent m/m.	Not less than 34.0 percent m/m
(iii) Sweetened condensed partly skimmed milk	Not less than 3.0 percent m/m and not more than 9.0 per cent m/m	Not less than 28.0 percent m/m	Not less than 34.0 percent m/m
(iv) Sweetened condensed High fat milk	Not less than 16.0 percent m/m	Not less than 30.0 percent m/m	Not less than 34.0 percent m/m

A.11.02.11 – Milk Powder means the product obtained by partial removal of from milk of Cow and/or Buffalo. The fat and/or protein content of the milk may be adjusted by addition and/or withdrawal of milk constituents in such a way as not to alter the whey protein to casein ratio of the milk being adjusted. It shall be of uniform colour and shall have pleasant taste and flavour free from off flavour and rancidity. It shall also be free from vegetable oil/fat, mineral oil, thickening agents, added flavour and sweetening agent. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:

Product	Moisture	Milk Fat	Milk protein in milk solids not fat	Titrable acidity (ml 0.1N NaOH/ 10 gm solids not fat	Solubility Percent	Total ash on dry weight basis
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(i) Whole milk powder (ii) Partly Skimmed milk powder	Not more than 4.0 percent m/m Not more than 5.0 percent m/m	Not less than 26.0 percent m/m Not less than 1.5 percent m/m and not more than 26.0 per cent m/m	Not less than 34.0 percent m/m Not less than 34.0 percent m/m	Not more than 18.0 Not more than 18.0.	Not less than 99 Not less than 99	Not more than 7.3 percent Not more than 8.2 percent
(iii) Skimmed milk powder	Not more than 5.0 percent m/m	Not more than 1.5 percent m/m	Not less than 34.0 percent m/m	Not more than 18.0	Not less than 99	Not more than 8.2 percent

- (h) items number A.11.02.17, A.11.02.18, A.11.02.18.01, A.11.02.18.02 and A.11.02.18.03 shall be renumbered as A.11.02.12, A.11.02.13, A.11.02.13.01, A. 11.02.13.02 and A. 11.02.13.03 respectively; (i) for items A.11.02.19 and A.11.02.20, the following shall be substituted, namely:-
 - **"A.11.02.14- Butter** means the fatty product derived exclusively from milk of Cow and/ or Buffalo or its products principally in the form of an emulsion of the type water in oil. The product may be with or without added common salt and starter cultures of harmless lactic acid and/or flavour producing bacteria. Table butter shall be obtained from pasteurized milk and/or other milk products which have undergone adequate heat treatment to ensure microbial safety. It shall be free from animal body fat, vegetable oil and fat, mineral oil and added flavour. It shall have pleasant taste and flavour free from off flavour and rancidity. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D:

Provided that where butter is sold or offered for sale with out any indication as to whether it is table or deshi butter, the standards of table butter shall apply. It shall conform to the following requirements:

Product	Moisture	Milk Fat	Milk solids not fat	Common salt
(1)	(2)	(3)	(4)	(5)
(i) Table Butter	Not more than 16.0 percent m/m	Not less than 80.0 percent m/m	Not more than 1.5 percent m/m	Not more than 3.0 percent m/m
(ii) Desi Cooking Butter	-	Not less than 76.0 percent m/ m	-	-

- (j) item number A.11.02.21 shall be renumbered as A.11.02.15 and in item A.11.02.15, so renumbered, in the Table,
 - (i) after serial number 6 and entries relating thereto, the following shall be inserted, namely:-

1	2	3	4	5	6
6 A	Chhatisgarh	40.0 to 44.0	26	3.0	0.5

(ii) after serial number 13 and entries relating thereto, the following shall be inserted, namely:-

1	2	3	4	5	6
13A	Jharkhand	40.0 to 43.0	28	3.0	0.5

(iii) after serial number 29 and entries relating thereto, the following shall be inserted, namely:-

1	2	3	4	5	6
29A	Uttaranchal	40.0 to 43.0	26	3.0	0.5

- (k) for item A.11.02.21.01, the following shall be substituted, namely:-
- **"A. 11.02.15.01-Milkfat/Butter oil and Anhydrous Milk Fat/Anhydrous Butter oil** means the fatty products derived exclusively from milk and/or products obtained from milk by means of processes which result in almost total removal of water and milk solids not fat. It shall have pleasant taste and flavour free

from off odour and rancidity. It shall be free from vegetable oil/fat, animal body fat, mineral oil added flavour and any other substance foreign to milk. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

Requirements	Milk Fat/ Butter Oil	Anhydrous milk fat/Anhydrous Butter Oil
(1)	(2)	(3)
(1)B.R. reading at 40°C	40 - 44	40 - 44
(ii) Moisture m/m	Not more than 0.4 percent	Not more than 0.1 percent
(iii) Milk Fat m/m	Not less than 99.6 percent	Not less than 99.8 percent
(iv) Reichert Value	Not less than 24	Not less than 24
(v) F.F.A as Oleic acid	Not more than 0.4 percent	Not more than 0.3 percent
(vi) Peroxide Value (milli- equivalents of Oxygen/kg fat)	Not more than 0.6	Not more than 0.3
(vii) Boudouin Test	Negative	Negative

- (l) items number A.11.02.22 and A.11.02.22.01 shall be renumbered as A.11.02.16 and A.11.02.16.01, respectively;
 - (m) for item A.11.02.23, the following shall he substituted, namely:-

"A.11.02.17 YOGHURT means a coagulated product obtained from pasteurized or boiled milk or concentrated milk, pasteurized skimmed milk and or pasteurized cream or a mixture of two or more of these products by lactic acid fermentation through the action of Lactobacillus bulgaricus and Steptococcus thermophilus. It may also contain cultures of Bifidobacterium bifidus and Lactobacillus acidophilus and other cultures of suitable lactic acid producing harmless bacteria and if added, a declaration to this effect shall be made on the label. The microorganisms in the final product must be viable and abundant. It may contain milk powder, skimmed milk powder, unfermented buttermilk, concentrated whey, whey powder, whey protein, whey protein concentrate, water soluble milk proteins, edible casein, and caseinates manufactured from pasteurized products. It may also contain sugar, corn syrup or glucose syrup in sweetened yoghurt and fruits in fruits yoghurt. It shall have smooth surface and thick consistency without separation of whey. It shall be free from vegetable oil/fat, animal body fat, mineral oil and any other substance foreign to milk. The product may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements:-

Product	Milk Fat	Milk solids not	Milk protein	Sugar
		fat		
(1)	(2)	(3)	(4)	(5)
(i) Yoghurt	Not less than 3.0	Not less than 8.5	Not less than 3.2	-
	percent m/m	percent m/m	percent m/m	
(ii) Partly	Not less than 0.5	Not less than 8.5	Not less than 3.2	-
skimmed Yoghurt	percent m/m and	percent m/m	percent m/m	
	not more than			
	3.0 percent m/m			
(iii) Skimmed	Not less than 0.5	Not less than 8.5	Not less than 3.2	-
Yoghurt	percent m/m	percent m/m	percent m/m	
(iv) Sweetened	Not less than 3.0	Not less than 8.5	Not less than 3.2	Not less than 6.0
Flavored Yoghurt	percent m/m	percent m/m	percent m/m	percent m/m
(v) Fruit Yoghurt	Not less than 1.5	Not less than 8.5	Not less than 2.6	Not less than 6.0
	percent m/m	percent m/m	percent m/m	percent m/m

Provided that titrable acidity as lactic acid shall not be less than 0.85 percent and not more than 1.2 percent. The specific lactic acid producing bacterial count per gram shall not be less than 10,00,000.

Provided further that the type of Yoghurt shall be clearly indicated on the label otherwise standards of plain Yoghurt shall apply. The Yoghurt subjected to heat treatment after fermentation at temperature not less than 65°C shall be labeled as Thermised or Heat Treated Yoghurt and shall conform to the above parameters except the minimum requirement of specific lactic acid producing count per gram:

(n) after item A.11.02.23 renumbered as A.11.02.17, the following shall be added, namely:-

"A.11.02.18 Whey Powder means the product obtained by spray or roller drying sweet whey or acid whey from which major portion of milk fat has been removed. **Sweet Whey** means the fluid separated from the curd after the coagulation of milk, cream, skimmed milk or buttermilk in the manufacture of cheese, casein or similar products,

principally with non-animal rennet type enzymes.

(1) **Acid Whey** is obtained after coagulation of milk, cream, skimmed milk or buttermilk, principally with acids of the types used for manufacture of edible acid casein, chhana, paneer, or fresh cheese. It shall be of uniform colour with pleasant taste and flavour free from off flavour and rancidity. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

Requirement	Whey Powder	Acid Whey Powder
(1)	(2)	(3)
(i) Moisture	Not more than 5.0 percent	Not more than 4.5 percent
(ii) Milk Fat	Not more than 2.0 percent m/m	Not more than 2.0 percent m/m
(iii) Milk Protein (Nx 6.38)	Not less than 10.0 percent m/m	Not less than 7.0 percent m/m
(iv) Total Ash	Not more than 9.5 percent m/m	Not more than 15.0 percent m/m
(v) pH (in 10.0% solution)	Not less than 5.1	Not more than 5.1
(vi) Lactose content expressed	Not less than 61.0 percent m/m	Not less than 61.0 percent m/m
as anhydrous Lactose		

Note:-

- (i) Although the powders may contain both anhydrous lactose and lactose monohydrates, the lactose content is expressed as anhydrous lactose.
- (ii) 100 parts of lactose monohydrate contain 95 parts of anhydrous lactose.

A.11.02.19 Edible Casein Products mean the products obtained by separating, washing and drying the coagulum of skimmed milk.

Edible acid casein means the product obtained by separating, washing and drying the acid precipitated coagulum of skimmed milk.

Edible non-animal rennet casein means the product obtained after washing and drying the coagulum remaining after separating the whey from the skimmed milk which has been coagulated by non-animal rennet or by other coagulating enzymes.

Edible caseinate means the dry product obtained by reaction of edible casein or fresh casein curd with food grade neutralizing agents and which has been subjected to an appropriate heat treatment. It shall be qualified by the name of the cation and the drying process used (Spray or Roller dried).

The products shall be white to pale cream or have greenish tinge, free from lumps and any unpleasant foreign flavour. It may contain food additives permitted in Appendix C. It shall conform to the microbiological requirements prescribed in Appendix D. It shall conform to the following requirements: -

Requirements	Non-animal rennet	Acid Casein	Caseinate
	Casein		
(1)	(2)	(3)	(4)
(i) Moisture	Not more than 12.0	Not more than 12.0	Not more than 8.0
	percent m/m	percent m/m	percent m/m
(ii) Milk Fat	Not more than 2.0	Not more than 2.0	Not more than 2.0
	percent m/m	percent m/m	percent m/m
(iii) Milk Protein	Not lessthan 84.0	Not less than 90.0	Not more than 88.0
(Nx6.38) on dry weight	percent m/m	percent m/m	percent m/m
basis			
(iv) Casein in Protein	Not less than 95.0	Not less than 95.0	Not more than 95.0
	percent m/m	percent m/m	percent m/m
(v) Ash including P ₂ O ₅	Not less than 7.5 percent	Not more than 2.5	-
	m/m	percent m/m	
(vi) Lactose	Not more than 1.0	Not more than 1.0	Not more than 1.0
	percent m/m	percent m/m	percent m/m
(vii) Free Acid ml 0.1 N	-	Not more than 0.27	-
Na OH /gm		percent	
(viii) pH Value in 10%	-	-	Not more than 8.0

(iii) in the said rules, in Appendix 'C', after Table-13 the following shall be inserted, namely :

"TABLE 14
[Food Additives for use in Milk Products]

Sl.No.	Name of Additives	Cheese/Sliced/ cut shredded cheese	Proces sed cheese	Processed Cheesespre ad	All types of Yoghurts	Evaporated milk	Sweetened condensed milk	Butter	Milk Fat/B utter Oil	and Anhydrous milk fat/Anhydr ous Butter Oil	Milk powder & Cream Powder	Ice cream/ Kulfi/Dr iedIce- Cream Mix/froz endesse rts/Milk Ice/Milk Lollies/I ce Candy,	Ca sei n pr od uc ts	Whe y Pow der	Chhan a/Pan eer
					1	T			1			1			
1	(a) Sodium Chloride, Potassium Chloride, Calcium Chloride	-	-	-	-			-	-		Cream powder -	-	-	-	-
	(b) Calcium Carbonate, potassium carbonate, sodium Carbonate	-	-	-	-			-		-	3gm/kg singly or in combinatio	-	-	-	-
	(c) Calcium citrate, Sodium citrate and potassium citrate	-	-	-	-			-		-	n maximum Milk	-	G MP	-	-
	(d) Calcium Salt of	-	-	-	-			_		-	powder – Calcium	_	-	_	_
	orthophosphoric acid (e) Calcium Salt of Polyphosphoric	_	_	_	_			_		_	chloride, Sodium	_	_		_
	acid (f) Potassium Salt of	_			_			_			Citrate, Sodium Salts of		G		
	orthophosphoric acid (g) Potassium salt of	-	-	-	-			-		-	orthophosp horic acid	-	MP G		-
	Polyphosphoric acid	-	-	-	-			-		-	and Polyphosph	-	MP	-	-
	(h) Sodium Salt of orthophosphoric acid	-	-	-	-			-		-	oric acid (as	-	G MP	-	-
	(i) Sodium Salt of Polyphosphoric acid	-	-	-	-	2 gm/kg singly or 3 gm/kg in combination maximum	2 gm/kg singly or 3 gm/kg in combination maximum	-		-	phosphate)- 3gm/kg singly or in combinatio n maximum	-	G MP	-	-
2	Carrageenan	-	-	-	5 gm/kg maximum	150 mg/kg maximum	-	-		-	-	10 gm/kg maximum	-	-	-
3	Sodium/Potassium/Calcium and Ammonium alginates	-	-	-	-	-	-	-		-	-	-	-	-	
4	Gelatine	-	-	-	10gm/kg maximum	-	-	-		-	-	-	-	-	
5	Lecithins	-	-	-	-	-	-	-		-	2.5gm/kg maximum	-	-	-	-
6	Pectins	-	-	-	10gm/kg maximum	-	-	-		-	-	10 gm/kg maximum	-	-	-
7	Sodium carboxy methyl cellulose	-	-	-	5 gm/kg maximum	-	-	-		-	-	10 gm/kg maximum	-	-	-
8	Agar	-	-	-	5 gm/kg maximum	-	-	-		-	-	10 mg/kg maximum	-	-	-
9	Guar gum	-	-	-	5 gm/kg maximum	-	-	-		-	-	10 gm/kg maximum	-	-	-
10	Xanthan gum	-	-	-	5 gm/kg maximum	-	-	-		-	-	10 gm/kg maximum	-	-	-
11	Tragacanth gum	-	-	-	5 gm/kg maximum	-	-	-		-	-	-	-	-	-
12	Karaya gum	-	-	-	5 gm/kg maximum	-	-	-		-	-	-	-	-	-
13	Furcellaran	-	-	-	5 gm/kg	-	-	-		-	-	10 gm/kg	-	-	-

14	Propylene glycol alginate	-	-	-	-	-	-	-	-	-	10 gm/kg maximum		-	-
15	(a) Poly Glycerol Esters of Fatty acids(b) Polyoxy ethylene sorbitan monolaurate(C) Polyoxy ethylenesorbitan tristearate (d) Polyoxy ethylene sorbitan monostearate	-	-	-	1		-	1	-	-	10 mg/kg maximum	1	1	-
16	Mono-and diglycerides of fatty acids	1	-	=	ı	II.	=	T	1	2.5 gm/kg	10 gm/kg maximum	-	-	-
17	Methyl cellulose	-	-	-	-	-	-	-	-	-	10 gm/kg maximum	-	-	-

S1.No.	Name of Additives	Cheese/Sliced/cut shredded cheese	Processed cheese	Processed Cheesespread	All types ofYoghurts	Evaporated milk	Sweetened condensed milk	Butter	Milk Fat/Butter Oil and Anhydrous milkfat/Anhydrous Butter Oil	Milk powder & Cream Powder	Ice cream/Kulfi/Dried Ice-Cream Mix/frozendesserts/Milk Ice/MilkLollies/Ice Candy,	Casein products	Whey Powder	Chhana /Panee r
B. Thick		g Agents singly or in	I				I							<u> </u>
1	Micro- crystalline cellulose	-	-	-	-	-	-	-	-	-	10 gm/kg maximum	-	-	-
	mbination:	hes singly or												
1	Acid-treated starch	-	-	-	-	-	-	-	-	-		-	-	-
2	Alkaline-treated starch	-	-	-	-	-	-	-	-	-		-	-	-
3	Bleached starch	-	-	-	-	-	-	1	-	-		-	1	-
4	Acetylated disarch adipate	-	-	-	-	-	-	-	-	-		-	-	-
5	Distarch glycerol	-	-	-	-	-	-	-	-	-		-	-	-
6	Acetylated distarch glycerol	-	-	-	-	-	-	-	-	-		-	-	-
7	Hydroxypropyl distarch glycerol,										30.0 gm/kg maximum subject			
8	Distarch phosphate	-	-	-	-	-	-	-	-	-	to declaration	-	-	-
9	Acetylated distarch phosphate	-	-	-	-	-	-	-	-	-		-	-	-
10	Hydroxypropyl distarch phosphate	-	-	-	-	-	-	-	-	-		-	-	-
11	Monostarch phosphate	-	-	-	-	-	-	-	-	-		-	-	-
12	Oxidized starch	-	-	-	-	-	-	-	-	-		-	-	-
13	Starch acetate	-	-	-	-	-	-	1	-	-		-	1	-
14	Hydroxypropyl Starch,	-	-	-	1	1	-	1	-	1		-	1	-

1	Venailla Extracts	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Vanillin	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Ethyl Vanillin	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Natural Flavouring and Natural Flavouring Substances/Nature identical Flavouring substances/artificial flavouring substances	-	-	-	GMP Subject to declaration	-	-	-	1	-	GMP Subject to declaration	-	-	-
E. Co	olours (natura	d – Singly or in												
	oination):-	•												
1	Curcumin	100 mg/kg maximum	100 mg/kg maximum	100 mg/kg maximum	-	-	-	100 mg/kg maximum	-	-	100 mg/kg maximum	-	-	-
2	Riboflavin	100 mg/kg maximum	100 mg/kg maximum	100 mg/kg maximum	-	-	-	-	-	-	50 mg/kg maximum	-	-	-
3	Chlorophyll	100 mg/kg maximum	100 mg/kg maximum	100 mg/kg maximum	-	-	-	-	-	-	-	-	-	-
4	Beta Carotene	100 mg/kg maximum	-	-	-	-		100 mg/kg maximum	-	-	100 mg/kg maximum	-	-	-
5	Carotene (natural extract)	100 mg/kg maximum	100 mg/kg maximum	100 mg/kg maximum	-	1	-	100 mg/kg maximum	-	-	1	-	-	-
6	Annatto Extracts on bixin/norbixin basis (50:50 ratio)	10-50 mg/kg maximum Normal to Orange coloured	10-50 mg/kg maximum Normal to Orange coloured	10-50 mg/kg maximum Normal to Orange coloured	-	-	-	20 mg/kg maximum	-	-	100 mg/kg maximum	-	-	-
7	Beta apo carotenal	35mg/kg maximum	-	-	-	-	-	35mg/kg maximum	-	-	100mg/kg maximum	-	-	-
8	Methyl ester of Beta apo 8 carotenoic acid	35mg/kg maximum	-	-	-	-	-	35mg/kg maximum	-	-	100mg/kg maximum	-	-	-
9	Ethyl ester of Beta apo 8 carotenoic acid	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Canthaxanthin	-	-	-	-	-	-	-	-	-	100 mg/kg maximum	-	-	-
11	Caramel colors (plain)	-	-	-	-	-	-	-	1	-	GMP	-	-	-
12	Caramel Colors (Ammonium Sulphite Process)	-	-	-	-	-	-	-	-	-	3.0 gm/kg maximum	-	-	-
13	(a) Ponceau 4R (b) Carmoisine(c) Erythrosine(d) Tartraizine(e) Sunset Yellow FCF (f) Indigo Carmine (g) Brilliant Blue FCF (h) Fast green FCF- singly or in combination		-	-	100 ppm (only in flavoured and fruit yoghurt)		-	-	-	-	100 mg/kg maximum	-	-	-

S1.No.	Name of Additives	Cheese/Sliced/cut shredded cheese	Processed cheese	Processed Cheesespread	All types ofYoghurts	Evaporated milk	Sweetenedcondensed milk	Butter	Milk Fat/Butter Oil and Anhydrous milk fat/Anhydrous Butter Oil	Milk powder & Cream Powder	Icecream/Kulfi/D ried Ice-Cream Mix/frozendesser ts/MilkIce/Milk Lollies/Ice Candy,	Casei n produ cts	Wh ey Po wd er	Chhana /Paneer
F. Acidit	ty Regulators:-													
1	Calcium Carbonates, Magnesium Carbonates	GMP	-	-	-		-	-	-	-		GMP	-	-
2	Sodium bi carbonate, Sodium Carbonate	-	-	-	-	-	-	-	-	-	-	1	1	-
3	Sodium Hydroxide, Calcium hydroxide	-	-	-	-	-	-	2000 mg/kg maximum	-	-	-	2000 mg/kg	-	-
												maximum		
4	Sodium phosphate	-	-	-	-	-	-	GMP	-	-	-	GMP	-	-
G. Prese	rvatives:-													
1	Sorbic Acid, Sodium Sorbate, Potassium sorbate, Calcium Sorbate expressed as Sorbic Acid	3000 mg/kg, maximum For cut, sliced & shiredded cheese 1000 mg/kg	3000 mg/kg maximum	3000 mg/kg maximum	-	-	-	-	-	-	-	-	-	2000 mg/kg maximum
2	Nisin	12.5 mg/kg maximum	12.5 mg/kg maximum	12.5 mg/kg maximum	-	-	-	-	-	-	-	-	-	12.5 mg/kg maximum
3	Propionic Acid/sodium Propionate/ Calcium propionate expressed as propionic acid- Singly or in Combination	3000 mg/kg maximum	-	-	-	-	-	-	-	-	-	-	-	2,000 mg/ kg maximum
H. For S	urface/rind Treatm	ent only:-												<u></u>
1	Sorbic Acid, Potassium sorbate, Calcium Sorbate expressed as Sorbic acid singly or in combination	1gm/kg maximum	-	-	-	-	-	-	-	-	-	-	-	-
2	Pimaricin (natamycin)	2 mg/dm sq. surface. Not present in depth of	-	-	-	-	-	-	-	-	-	-	-	-
		5mm			1									1
I. Antica	king Agents:-													

1	(a) Cellulose, (b) Carbonates of Calcium and Magnesium, (c) Phosphates of Calcium and Magnesium, (d) Silicates of calcium, magnesium, aluminium or sodium or Silicon dioxide (e) myristates, palmitates or Stearates of aluminium, calcium potassium or sodium or sodium	10gm/kg maximum	-	-	-	-	-	-	-	-	-	-	-	ī
J. Ac	idifying Agent ination:-	s singly or in												
1	Citric Acid	-	40 gm/kg maximum with emulsifiers	40 gm/kg maximum with emulsifiers	-	-	-	-	-	-	GMP including Sod/Pot Salts	-	-	-
2	Phosphoric Acid		40 gm/kg maximum with	40 gm/kg maximum with	-	-	-	-	-	-	-	-	-	-
3	Acetic Acid		emulsifiers 40 gm/kg	emulsifiers 40 gm/kg	_			_			GMP	_		
			maximum with	maximum with emulsifiers	-	-	-	-	-	-	GMP	-	-	-
4	Lactic Acid		40 gm/kg maximum with emulsifiers	40 gm/kg maximum with emulsifiers	-	-	-	-	-	-	GMP including Sod/Pot Salts	-	-	-
5	Sodium bicarbonate/ Calcium Carbonate expressed as Anhydrous substance		40 gm/kg maximum with	40 gm/kg maximum with	-	-	-	-	-	-	-	-	-	-
			emulsifiers	emulsifiers										
6	Malic acid (DL-)	-	-	-	-	-	-	-	-	-	GMP	-	-	-
7	L-(+Tartaric Acid & Sodium/ Potassium Salts)	-	-	-	-	-	-	-	-	-	1 gm/kg maximum	-	-	-
8	Sodium Hydrogen Carbonate	-		-	-	-	_	-	-	-	GMP	-	-	-
9	(a) Sodium/Potassium/ calcium Orthophosphate expressed as P ₂ O ₅ , (b) Sodium/Potassiium Polyphosphate expressed as P ₂ O ₅	-	-	-	-	-	-	-	-	-	2 gm/kg singly or in combination with as P2Os,			-

Sl.No.	Name of Additives	Cheese/Sliced/cut shredded cheese	Processed cheese	Processed Cheesespread	All types ofYoghurts	Evaporated milk	Sweetenedcondensed milk	Butter	Milk Fat/Butter Oil and Anhydrous milk fat/Anhydrous Butter Oil	Milk powder & Cream Powder	Icecream/Kulfi/Dried Ice- Cream Mix/frozendesserts/MilkIc e/Milk Lollies/Ice Candy,	Cas ein pro duc ts	W h e y P o w d e r	Chhana /Panee r
combin		ngly or in												
1	(a) Potassium salt of mono/di and poly phosphoric acid, (b) Calcium salt of mono/di and poly phosphoric acid, (c) Sodium salt of mono/di and poly phosphoric acid	-	40 gm/kg maximum except that added phosphorus compound should not exceed 9g/kg calculated as Phosphorus	40 gm/kg maximum except that added phosphorus compound should not exceed 9g/kg calculated as Phosphorus	-	-	-	-	-	-	-	-	-	-
2	(a) Sodium Citrate, (b) potassium Citrate and (c) Calcium Citrate	-			-	-	-	-	-	-	-	-	-	-
3	(a) Citric acid with Sodium hydrogen carbonate and or Calcium carbonate, (b) phosphoric acid with sodium hydrogen carbonate and or calcium carbonate	-			-	-	-	-	-	-	-	-	1	-
	tioxidants	singly or in												
	ination:-													
1	L-Ascorbic acid	-		-	-	-	-	-	-	0.5 gm/kg maximum	-	-	-	-
2	Ascrobyl Palmitate, ascorbyl Stearate	-	-	-	-	-	-	-	500 mg/kgmaximum	0.5 gm/kg maximum as ascorbic acid only in cream powder	-	-	-	-
3	Alpha tocopherols, Mixed Tocopherols	-	-	-	-	-	-	ı	-	-	-		1	-
4	Propyl gallate	-	-	-	-	-	-	-	100 mg/kg maximum	-	-	-	-	-
5	Octyl gallate	-	-	-	-	-	-	-	100 mg/kg maximum	-	-	-	-	-
6	Ethyl gallate	-	-	-	-	-	-	-	100 mg/kg maximum	-	-	-	-	-
L.	Dodecyl	-	-	-	-	-	-	-	100 mg/kg maximum	-	=	-	-	-

8	Butylated hydroxy	-	-	-	-	-	-	-	175 mg/kg maximum	100 mg/kg maximum	-	-	
M. Ant	anisole ioxidant Syn	lergists:-					<u> </u>	<u> </u>					
1	Citric Acid	-	-	-	-	-	-	-	GMP	GMP	-	-	
N. Mi	scellaneo	us:-											
1	Glycerol	-	-	=	-	-	-	-	-	-	50 gm/kg maximum	-	

TABLE-15 (Use of Food Additives in individual variety cheeses)

	Name of FoodAdd itives	Cheddar	Danbo	Edam	Gouda	Havarti	Samsoe	Emment aler	Tilsiter	Saint- Paulin	Provolon e	Cottage/ creamed Cottage	Coulom miers	Cream Cheese	Camemb ert	Brie	Extra HardGrat ing Cheese
A	Stabi lizers																
1	Calcium chloride	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	200 mg/kg of Milk maximum	-	200 mg/kg of Milk maximum	200 mg/ kg of Milk maximum	200 mg/kg of Milk maximum
В	Colour :																
1	Annatto	600 mg/kg maximum	600 mg/kg maximum	600 mg/kg maximum	600 mg/kg maximum	600 mg/kg maximum	600 mg/kg maximum	-	600 mg/kg maximum	600 mg/kg maximum	-	-	600 mg/kg maximum	-	600 mg/kg maximum	600 mg/kg maximum	
3	Riboflavi n	-	-	-	mammam	-	-	-	GMP	-	-	-	-	-	-	-	-
4	Chlorop hyll	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15 mg/kg maximum
	Name of FoodAd ditives	Cheddar	Danbo	Edam	Gouda	Havarti	Samsoe	Emmen taler	Tilsiter	Saint- Paulin	Provolo ne	Cottage /creame d Cottage	Coulom miers	Cream Cheese	Camem bert	Brie	Extra HardGra tingChe ese
С	Enzy mes:-	·			·	·		ľ		·	·			·			
	(1) Alpha- amylase (Aspergillu s oryzae var.), (2) Alpha- amylase (Bacillus megateriu m expressed in Bacillus subtilis), (3) Alpha- amylase (Bacillus stearothe mophilius expressed in B. subtilis), (4) Alpha- amylase (Bacillus stearothe mophilius expressed in B.	1 gm/Kg of milk solids maximum	-	-	-	-	-	-	-	-	GMP	-	-	-	-	-	1 gm/kg of milk solid maximum

	(=)																
	, (5) Alpha- amylase (Bacillus subtilies), (6) Alpha- amylase (Carbohyd rase) (Bascillus lichenifor mis) Enzym es from GMO should be labelle d																
D	Preser	•															
	vative																
	s:																
1	Sorbic	1 gm/kg	-	-	-	-	-	-	-	-	-	-	-	Ι-	_	_	3gm/Kg maximum
-	Acid, Sodium sorbate, Potassiu m sorbate calculat	maximum	-				_										maximum
	ed as																
	Sorbic Acid																
	Thick ening Agent s singly or in combination:																
1	Carragee			l I			1	-	Ι	I	-	I		5	-	_	-
	nan	-	-	-	=	=	-		-	-		-	-	gm/Kgm aximum			
2	Guar Gum	-	-	-	-	-	-	-	-	-	-	-	-	5 gm/Kgm aximum	-	-	-
3	Karaya Gum	-	-	-	-	=	-	-	-	-	-	-	-	5 gm/Kgm aximum	-	-	-
4	Tragaca nth Gum	-	-	-	-	1	-	-	-	-	-	-	-	5 gm/Kgm aximum	-	-	-
5	Xanthan Gum	-	-	-	-	-	-	-	-	-	-	-	-	5 gm/Kgm aximum	-	-	-
6	Alginate of Sodium/	-	-	-	-	-	-	-	-	-	-	-	-	5 gm/Kgm aximum	-	-	-
	Potassiu m/Calci um													damidiii			
		-	-	_	-	-	-	-	-	-	-	-	-	5	-	-	-
7	Ammoni	-															

	um Alginate													gm/Kgm aximum			
8	Gelatine	1	1	1	1	1	1	1	1	-	1	1	1	5 gm/Kgm aximum	1	ı	-
9	Pectins	1	1	ı	ı	1	1	1	1	-	1	1	1	5 gm/Kgm aximum	1	ı	-
10	Propylen e Glycol Alginate	-	-	-	-	-	-	-	-	-	-	-	-	5 gm/Kgm aximum	-	-	-

(iv) in the said rules, in Appendix 'D', after Table-2 the following Table shall be inserted, namely,-

(Microbiological Parameter for Milk Products)

S.No.	Requirement	IceCream/FrozenDessert/MilkLolly/IceCandy/DriedIce Cream mix	Cheese/ProcessedCheese/Cheese Spread/Allother Cheeses	EvaporatedMilk	SweetenedCondensedMilk	Butter	ButterOil/ButterFat/Ghee	Yoghurt/Dahi
1	Total Plate Count	Not more than 2,50,000/gm	Not more than 50,000/gm	Not more than 500/gm	Not more than 500/gm	Not more than 5000/gm	Not more than 5000/gm	Not more than 10,00,000/gm
2	Coliform Count	Not more than 10/gm	Absent in 0.1 gm	Absent in 0.1 gm	Absent in 0.1 gm	Not more than 5/gm	Absent in 0.1 gm	Not more than 10/gm
3	E. Coli	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1.0 gm
4	Salmonella	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm
5	Shigella	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm
6	Staphylococcus aureus	Absent in 1 gm	Absent in 1 gm	Not more than 100/gm	Not more than 100/gm	Absent in 1 gm	Absent in 1 gm	Not more than 100/gm
7	Yeast and Mould Count	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Not more than 10/gm	Not more than 20/gm	Absent in 1 gm	Not more than 100/gm
8	Anaerobic Spore Count	Absent in 1 gm	Absent in 1 gm	Not more than 5/gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm
9	Listeria Monocytogens	Absent in 1 gm	Cheese other than hard cheese: Absent in 25 gm Hard Cheese: Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm

S.No.	Requirements	Milk Powder/CreamPowder/WheyPowder	Edible CaseinProducts	UHT Milk/UHTFlavoured Milk	Pasteurised Milk/PasteurisedFlavoured Milk	Sterilised Milk/SterilisedFavoured Milk	Khoya/ Chhana/Paneer	Chakka/Srikhand
1	Total Plate Count	Not more than 50,000/gm	Not more than 50,000/gm	Nil	Not more than 30,000/gm	Nil	Not more than 50,000/gm	Not more than 50,000/gm
2	Coliform Count	Absent in 0.1 gm	Absent in 0.1 gm	Absent in 0.1 gm	Absent in 0.1 ml	Absent in 0.1 gm	Not more than 90/gm	Not more than 10/gm
3	E. Coli	Absent in 0.1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm
4	Salmonella	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm
5	Shigella	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm

6	Staphylococcus aureus	Absent in 0.1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Not more than 100/gm	Not more than 100/gm
7	Yeast and Mould Count	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Not more than 250/gm	Chakka: Not more than 10/gm Shrikhand: Not more than 50/gm
8	Anaerobic Spore Count	Absent in 1 gm	Absent in 1 gm	Not more than 5/gm	Absent in 1 gm	Not more than 5/gm	Absent in 1 gm	Absent in 1 gm
9	Listeria Monocytogens	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm	Absent in 1 gm

Sd/-(Rita Teaotia) Jt. Secy.

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